

(b) a tape carrier having a device hole for accommodating the semiconductor chip therein and a plurality of side-situated lead-bonding areas and corner-situated lead-bonding areas surrounding the device hole;

(c) a set of inner leads, including:

(c1) a group of I/O leads, which are bonded between the respective I/O pads on the semiconductor chip and the side-situated lead-bonding areas on the tape carrier, so as to allow the semiconductor chip to be electrically connected to the tape carrier by the I/O leads; and

(c2) a group of dummy leads, which are bonded between the respective dummy pads on the semiconductor chip and the corner-situated lead-bonding areas on the tape carrier, and thereby provide firm support to the corners of the semiconductor chip, so as to hold the semiconductor chip in position with respect to the tape carrier and to enhance mechanical strength of the tape carrier package structure.

6. (Amended) A tape carrier package structure, which comprises:

(a) a semiconductor chip having:

(a1) a plurality of I/O pads arranged along the sides thereof; and

(a2) a plurality of dummy pads arranged on the corners thereof;

(b) a tape carrier having a device hole for accommodating the semiconductor chip therein and a plurality of side-situated lead-bonding areas and corner-situated lead-bonding areas surrounding the device hole;

(c) a set of inner leads, including:

(c1) a group of I/O leads, which are bonded between the respective I/O pads on the semiconductor chip and the side-situated lead-bonding areas on the tape carrier, so as to allow the semiconductor chip to be electrically connected to the tape carrier by the I/O leads; and

(c2) a group of dummy leads, which are bonded between the respective dummy pads on the semiconductor chip and the corner-situated lead-bonding areas on the tape carrier, and thereby provide firm support to the corners of the semiconductor chip, so as to hold the semiconductor chip in position with respect to the tape carrier and to enhance mechanical strength of the tape carrier package structure, and which are spaced at substantially the same pitch as the I/O leads.

10. (Amended) A tape carrier package structure, which comprises:
- (a) a semiconductor chip having:
 - (a1) a plurality of I/O pads arranged along the sides thereof; and
 - (a2) a plurality of dummy pads arranged on the corners thereof;
 - (b) a TAB tape having a device hole for accommodating the semiconductor chip therein and a plurality of side-situated lead-bonding areas and corner-situated lead-bonding areas surrounding the device hole;
 - (c) a set of inner leads, including:
 - (c1) a group of I/O leads, which are bonded between the respective I/O pads on the semiconductor chip and the side-situated lead-bonding areas on the TAB tape, so as to allow the semiconductor chip to be electrically connected to the TAB tape by the I/O leads; and
 - (c2) a group of dummy leads, which are bonded between the respective dummy pads on the semiconductor chip and the corner-situated lead-bonding areas on the TAB tape, and thereby provide firm support to the corners of the semiconductor chip so as to hold the semiconductor chip in position with respect to the tape carrier and to enhance mechanical strength of the tape carrier package structure, and which are spaced at substantially the same pitch as the I/O leads.

REMARKS

Claims 1-12 are pending in the application. Claims 1, 6, and 10 have been amended by the present amendment. The claims as amended are fully supported by the specification as originally filed, e.g., at page 5, lines 11-22; page 6, lines 11-16; and page 7, lines 1-12.

Applicants claim a tape carrier package structure, including a semiconductor chip with a plurality of dummy pads arranged on the corners thereof and a group of dummy leads bonded between the dummy pads and corner-situated lead bonding areas on the tape carrier, the bonding arrangement of the dummy leads providing firm support to the corners of the semiconductor chip, so as to hold the semiconductor chip in position with respect to the tape carrier and to enhance mechanical strength of the tape carrier package structure.